

ZIMBABWE'S AGRICULTURAL REVOLUTION REVISITED

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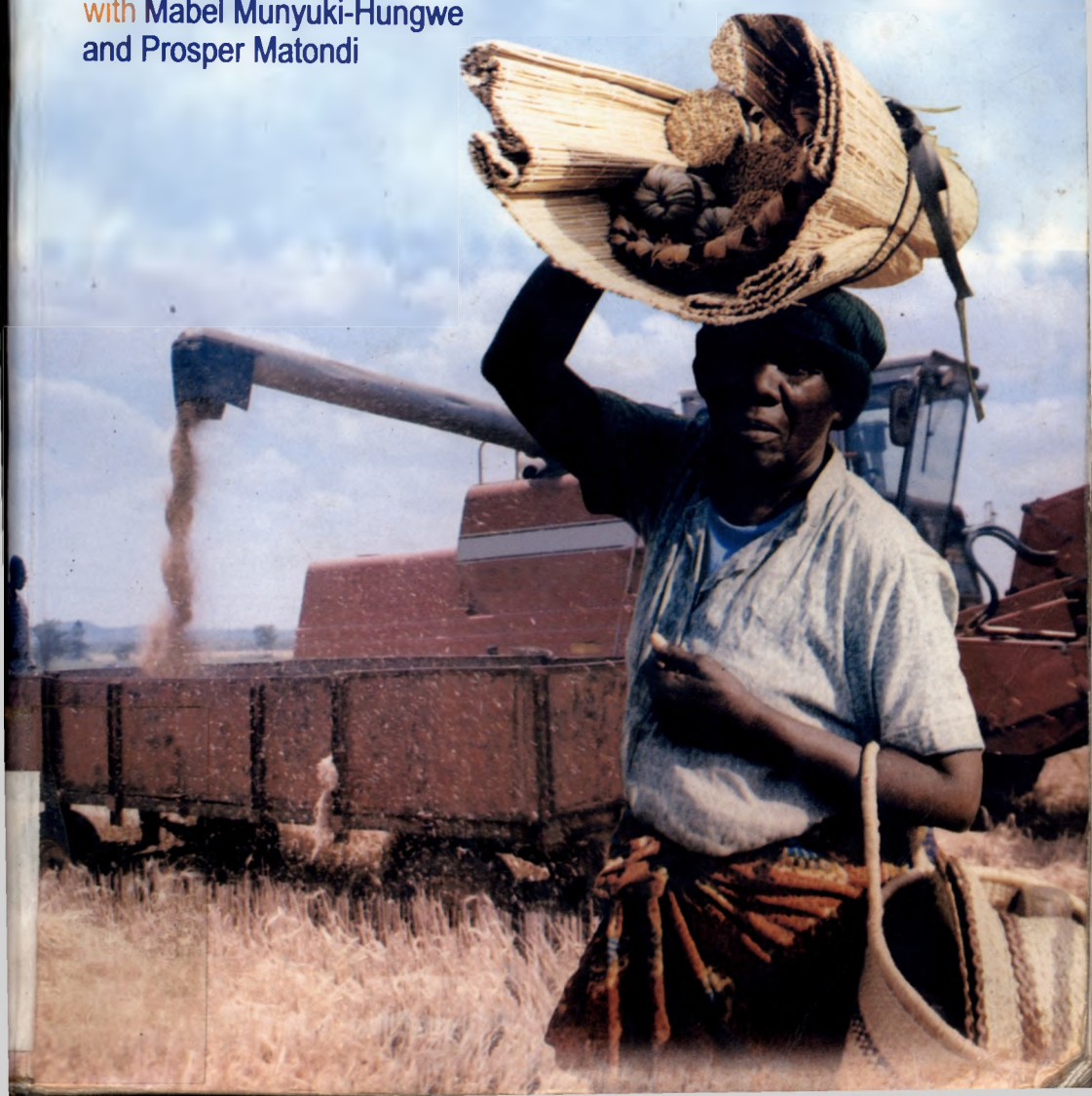
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Movement of maize grain by road tends to be expensive and slow

Agricultural marketing

Kay Muir-Leresche and Chiedza Muchopa

Zimbabwe has had a wide range of experience with different types of marketing systems, ranging from state-controlled to free market systems. Given that Zimbabwe is an agro-based economy, the development of an efficient marketing system is key to sustainable agricultural growth and economic development. Like any other developing country, Zimbabwe followed the development process regarding agricultural commodity marketing systems, starting with state control then moving to a free market system from the 1930s to late 1990s. State interventions during the 1990s were to regulate and facilitate the development of markets as well as protect against unfair commodity pricing systems. The land and agrarian reforms beginning in 1999 and the food crisis during the same period ushered back state control and interventions in the marketing of agricultural commodities. Some of the structural and institutional developments in the sector from 1999 appear to have been planned but other fundamental changes were made on an *ad-hoc* basis. This chapter discusses the marketing of agricultural commodities from the pre-independence era to the situation in 2005. The chapter then critically examines the current status of marketing of major agriculture commodities.

Evolution of agricultural marketing

Government intervened in marketing during the depression of the 1930s to keep white farmers on the land. Most of the interventions at policy and practical levels were biased in favour of small-scale white farmers. Producer prices were subsidized initially by consumers who paid prices above import parity and by the communal farmers and large-scale farmers who sold at low export prices. The direct price discrimination was discontinued after the Second World War but communal farmers continued to be disadvantaged by the location of marketing depots and by licensed agents who took advantage of their monopoly position.

This restrictive marketing system which prevented competition and encouraged unidirectional trade was one of the principal causes of low rates of economic growth in communal areas. It created barriers to entry and discour-

aged the emergence of rural markets and private traders. The expansion of infrastructure and social services after independence improved living conditions in rural areas. However, the highly centralized marketing and control continued in the 1980s reducing opportunities for further rural growth and industrialization. Price and input incentives increased agricultural output after independence but the rural areas remained undeveloped. At independence, less than 5 per cent of marketed output came from communal farmers. But with the provision of input packs and the higher maize prices, smallholder maize production doubled over the 1979–85 period. Most of the increase came from a minority (10 per cent) of smallholders in natural regions II and III.

The origin and development of the state agricultural marketing systems prior to liberalization are outlined in table 13.1.¹⁵⁵ A common feature in many countries was that most of the agricultural commodities were controlled by state-owned boards with *de jure* monopoly controls and, in the case of Zimbabwe, these were also *de facto*. There was little black market trading either internally or by cross-border trading. The state marketing system was strictly controlled and efficient – it always purchased surpluses and it always provided sufficient maize to urban consumers. In Tanzania, Zambia, Kenya and other countries, the state marketing systems sometimes failed to purchase or pay for the surplus in years of plenty and failed to make grain available for consumers in deficit years.

Although technically efficient, the state marketing system was economically highly inefficient and regressive, thus having negative effects on both growth and equity. These inefficiencies were brought about by monopoly power and pricing inefficiencies, bureaucratic procedures and the restrictions on trade between communities in different areas. Jayne, Chisvo and Rukuni (1999) estimated that the marketing controls implicitly taxed the poorest rural people some 20–30 per cent of potential producer prices in most years. The impacts of these distorting effects are highlighted in the section on producer prices.

Agricultural marketing parastatals incurred heavy losses in the 1980s as a result of the expansion of the system to serve a large number of widely-dispersed smallholders. These losses were exacerbated by the subsidies which predominantly favoured consumers and, in some cases, large-scale farmers (Muir-Leresche, 1998). Table 13.1 shows that most of the subsidies paid to the marketing boards accrued to large-scale farmers or urban consumers and were therefore regressive. Despite the objectives of promoting growth and equity, the policies were inimical to both.

¹⁵⁵ See Muir (1983), Muir-Leresche (1998) and Takavarasha (1994) for more details on agricultural marketing.

Table 13.1 Agricultural marketing boards prior to liberalization

Authority	Role and responsibilities
Agriculture Marketing Authority (1967) discontinued	Coordinated and arranged financing for the commodity boards. The Agriculture Marketing Authority was dissolved in 1994 and discussions of reviving it started in 2003.
Grain Marketing Board (1931) (Full control and monopoly on all internal and external grain trading reintroduced 2001)	<p>Controlled: maize (1931), sorghum (1950), groundnuts (1952), soyabeans (1969), wheat (1970), coffee (1972), sunflowers (1984), bulrush millet (<i>mhunga</i>) and finger millet (<i>rapoko</i>) (1950–60 and 1984). All decontrolled 1991–1994 except Grain Marketing Board which remained a residual trading board for the purchase, grading, handling, transport, storage, disposal and all exports and imports of maize and wheat.</p> <p>Until 1993 there was total monopoly on purchase, sale and exports. Limited trading of maize within specified zones was allowed but not across zones. Although legally allowed to sell maize grain from depots, in practice no grain was sold locally until the late 1980s. Some 60 per cent of the value of all maize purchases in the 1980s came from communal farmers. Direct government subsidies to the Grain Marketing Board averaged Z\$43.2 million per annum between 1980 and 1989. In years of surplus Grain Marketing Board subsidies were directed towards producers (surpluses exported at a loss). In all other years producer prices were below parity and subsidies benefited mainly urban consumers or sustained marketing inefficiencies.</p>
Cold Storage Commission (1938) (Structure changed 2000)	<p>Primarily responsible for the purchase, slaughter and distribution of cattle and external trading. Transport costs were refunded to large-scale beef farmers. It was also a residual buyer for sheep and goats. The commission was historically important in developing poultry and pig industries which were decontrolled once established (Pilborough in Muir, 1983). The commission also played an important role in cattle finance, drought relief and state cattle ranching. Only 5 per cent of purchases were from communal land farmers. Direct government subsidies to the Cold Storage Commission included consumer subsidies and losses on cattle finance and drought relief schemes. Subsidies averaged Z\$47 million per annum between 1982 and 1989. Effective monopoly because of health restrictions on urban sales from other sources. Reduced enforcement and effective competition in urban areas from private abattoirs after access to imported equipment after 1994. Legal control of all external trade remains.</p>
Dairy Marketing Board (1952) (Dairiboard Zimbabwe (Pvt) Limited, 1996)	<p><i>De jure</i> but after 1991 only <i>de facto</i> monopoly trading board in the purchase, processing, distribution and external trade of all dairy products. About 1 per cent of the value of all purchases from communal farmers. Direct government subsidies to the board included consumer subsidies and averaged Z\$34 million per annum between 1980 and 1990. Commercialized in 1993 and started making profits – effective monopoly despite some small dairy competition.</p>
Cotton Marketing Board (1969) Cosco (Private) Limited 1997)	<p>Monopoly trading board in the purchase, processing and export of all cotton products until after economic structural adjustment programme. The board required to fulfil local textile manufacturers requirements at set prices before exporting to best advantage. Well over 50 per cent of the value of all purchases were from smallholders. In most years producers were paid less than export value, thus subsidizing manufacturers and reducing deficit which averaged Z\$5.2 million per annum between 1980 and 1989. Commercialized in 1994 and some competition allowed.</p>
Tobacco Marketing Board (1936) TIMB (1997)	<p><i>De jure</i> powers to determine where all tobacco is sold, including the amounts sold by any one farmer. The tobacco is sold on farmer-owned auction floors where bidding is open to all licensed buyers.</p>

Producer price policy

Before 1970, producer prices were set at levels aimed at protecting producers, although there were a few years when they were set in favour of consumers.¹⁵⁶ During the 1970s prices to urban consumers were subsidized in a bid to keep down wages and to buy political favour. In this period, groundnut and cotton farmers tended to be taxed whereas wheat farmers were heavily subsidized in order to achieve self-sufficiency. Maize prices declined along with maize output throughout the 1970s.

Producer prices were set on a cost of production basis negotiated annually between the Commercial Farmers' Union and the government. This encouraged a bias towards high-cost, high-yield technologies. In addition, the producer price policies prior to independence subsidized the capital-intensive commodities produced by large-scale farmers and tended to tax smallholder crops such as groundnuts and cotton. The system was continued after independence, with smallholder representatives being included in the annual price negotiation with the government. However, increasingly throughout the 1980s, producer prices were influenced by the state marketing board deficits which, in turn, were influenced by the cost of establishing depots and collection points in un-economic areas and by the low controlled selling prices.¹⁵⁷

Producer and controlled retail selling prices were set uniformly throughout the country (pan-territorial) and throughout the year (pan-seasonal). Farmers with access to the Grain Marketing Board markets were, therefore, discouraged from maintaining on-farm storage. This increased the burden on state marketing boards and negatively affected growth and equity since those able to sell early in the season (large-scale farmers) benefited. However, smallholder farmers lacked access to drying facilities and reliable transport, making it risky to sell grain to the board at harvest and rely on repurchasing grain later in the year. The pan-territorial prices also encouraged the production of maize in remote, surplus areas rather than in deficit areas. They provided higher incomes to farmers in high rainfall areas and lower incomes to low-rainfall areas where yields were low (Muir and Takavarasha, 1988).

Real prices for commodities declined during the 1980s.¹⁵⁸ Although real producer prices of all commodities declined, there was an increase in the production of export commodities responding to export incentives.

In the processing and agro-industrial sectors, the price, exchange rate and

¹⁵⁶ See Muir-Leresche (1985) for an analysis of price policy prior to independence.

¹⁵⁷ The Grain Marketing Board selling price was controlled by the Ministry of Trade and Commerce for the benefit of consumers.

¹⁵⁸ Net protection coefficients all indicate producer taxes and declining real prices (Jansen and Muir, 1994).

regulatory policies of the 1980s reflected the influence of the small but powerful industrial lobby and favoured capital-intensive technologies and the formal sector. There was only a very small informal sector and limited local competition because of the restricted access to imports. The policies did not encourage competition and discriminated against new entrants, reducing the opportunities for achieving both growth and equity.

Market liberalization in the 1990s

Although the national policy documents were vague about decontrolling markets, agricultural market decontrol was one of the first areas to be addressed as part of the economic structural adjustment programme. In February 1991, parliamentary changes to the marketing board constitutions gave the boards greater autonomy in pricing and business decisions and by August 1991, independent

Table 13.2 Zimbabwe: real producer prices 1985/86–1990/91 at constant 2000 prices^a

	Year						
	85/86	86/87	87/88	88/89	89/90	90/91	91/92
White maize (\$/tonne)	5,106	3,877	3,620	3,515	3,388	2,871	2,424
Soyabeans (\$/tonne)	9,078	7,322	7,744	7,571	6,855	6,189	5,028
Sunflower seed (\$/tonne)	9,078	7,322	7,844	7,751	7,170	6,444	5,208
S/groundnuts (\$/tonne)	21,276	16,152	18,102	18,025	15,758	15,951	11,224
Wheat (\$/tonne)	8,085	6,461	6,638	6,579	6,303	5,870	4,669
Seed cotton (c/kg)	1,901	1,615	1,609	1,532	1,466	1,493	1,266
Beef (c/kg)	4,340	3,877	4,747	4,524	4,302	3,879	3,313
Dairy (c/l)	1,160	877	821	824	797	671	575
Tobacco (flue-cured) c/kg	8,902	4,693	7,914	7,746	10,220	14,768	7,276

^a Deflated by consumer price index (2000=100) from CSO (2001), prices are based on official sources – Grain Marketing Board, Cottco, Dairiboard Zimbabwe Limited, floor prices or ZIMACE bid/offer price.

Sources: Agricultural Finance Corporation (1998), Commercial Farmers' Union indicative prices, Ministry of Lands, Agriculture and Rural Resettlement (2000)

boards of directors were established. In May 1991, two commercial dairy co-operatives were given permission to market milk products and compete with the Dairy Marketing Board. In August, sorghum and millets were decontrolled, becoming regulated crops for which the Grain Marketing Board would set floor prices and remain a residual buyer. In September, private coffee marketing was permitted in cooperation with the Grain Marketing Board. Cotton and groundnut farmers received supplementary payments so that final prices approximated export parity. Yellow maize had been partially decontrolled in 1990, with farmers free to sell to any domestic buyer. However, in 1991 farmers were threatened with the recontrol of yellow maize if they continued the switch from the controlled white maize to the uncontrolled yellow maize. The Grain Marketing Board announced plans to close more than twenty uneconomic depots but few closures were enacted at the time.

Table 13.3 Real producer prices of various agricultural commodities 1990/91–1999/00 at constant 2000 prices^b

	Year									
	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00 ^b
White maize (\$/tonne)	2,871	2,424	3,872	5,179	4,226	4,642	3,905	5,188	3,741	4,600
Soyabeans (\$/tonne)	6,189	5,028	6,688	8,632	7,044	10,444	9,828	9,140	8,105	8,300
Sunflower seed (\$/tonne)	6,444	5,208	7,005	8,471	6,913	7,736	6,509	3,582	5,923	7,000
S/Groundnuts (\$/tonne)	15,951	11,224	10,561	10,359	11,270	23,209	20,177	15,316	10,131	13,500
Wheat (\$/tonne)	5,870	4,669	7,005	8,345	6,809	10,444	8,299	6,299	5,923	6,835
Seed cotton (c/kg)	1,493	1,266	2,119	1,842	1,738	1,625	1,953	2,594	1,637	1,400
Beef (c/kg)	3,879	3,313	2,598	2,653		6,189	6,642	6,052	4,364	4,500
Dairy (c/l)	671	575	507	622		743	775	716	770	780
Tobacco (flue-cured) c/kg	14,768	7,276	5,651	7,944	8,470	11,222	9,440	8,582	10,323	8,131

^b Note: deflated by consumer price index (2000=100) from CSO (2001), prices are based on official sources – Grain Marketing Board, Cottco, Dairiboard Zimbabwe Limited, floor prices or ZIMACE bid/offer price

Sources: Agricultural Finance Corporation (1998), Commercial Farmers' Union indicative prices, Ministry of Lands, Agriculture and Rural Resettlement (2000)

Agricultural output grew during the early 1990s and then declined. The post-reform period reduced the implicit taxes of the 1980s but there were other distortions and regulations that discouraged new business and competition. The adjusted nominal protection coefficients for agricultural commodity exports in the 1980s averaged around 0.6 whereas in the 1990s they remained closer to 1, except for tobacco which varied between 0.8 and 0.9, depending on assumptions (Muir-Leresche, 1998).

Maize marketing

Maize is Zimbabwe's staple food, accounting for over 50 per cent of the average calorie consumption. During the colonial era, the Grain Marketing Board effectively serviced only the large-scale commercial sector. The communal sector was also proscribed from marketing freely yet the farmers had difficulty accessing the Grain Marketing Board except through designated agents who obtained monopoly rents. In 1980, the new Zimbabwean government extended the support services long enjoyed by the commercial settlers to the rural farming sector. The Grain Marketing Board expanded into rural areas by opening up an extensive network of grain silos, collection points and feeder depots throughout the rural areas.

The extension of marketing and agricultural support services to rural farmers resulted in rapid growth in production of maize and other grains creating a record surplus of maize and small grain which increased the marketed output. Smallholder farmers increased production and accounted for over 60 per cent of the marketed maize and 100 per cent of small grains handled by the Grain Marketing Board. The board was responsible for collecting grain from collection points in all the rural depots and transported it to centralized storage silos for sale to millers. The maize producer prices were pan-territorial and pan-seasonal. Given that the millers were located in the major urban centres the milled products had to be transported back to the rural areas.

In the 1980s, maize meal was subsidized for political and social reasons. Part of the subsidy was paid to the Grain Marketing Board to balance their trading account (selling price to millers being held below cost) and the balance of the subsidy was paid directly to the four major milling companies. Despite the monopoly role of the Grain Marketing Board and the legislation that prohibited cross-district trading, some rural hammer millers were operating in communal areas. These subsidies resulted in the closure of an estimated 200 rural mills as farmers sold their maize to the Grain Marketing Board and bought the subsidized maize meal from the urban centres. The subsidies were estimated at 60 per cent of retail roller meal (straight run maize meal) price whereas the local hammer-mill price would be only 5 per cent higher than the controlled

price (Child, Muir and Blackie, 1985).¹⁵⁹ The maize meal subsidy was rationalized on the basis of equity, despite its very high costs. The more remote areas did not receive access to the subsidized maize meal. Since the majority of Zimbabwe's poor live in these areas, the maize meal subsidy did not address equity. The distortions from the marketing controls and from the maize subsidy reduced opportunities for small rural traders and urban millers to participate in the market. These distortions led to increasingly large subsidies to the Grain Marketing Board.

Expansion of Grain Marketing Board monopoly marketing infrastructure to the rural areas increased operational costs for the parastatals. The policy of offering incentive producer prices to stimulate production and much lower consumer prices to promote household food security left the Grain Marketing Board with a huge deficit in its annual trading account and this became increasingly burdensome in the late 1980s. During the same period, the domestic macro-economic situation was rapidly deteriorating due to national fiscal deficits and declining economic growth. The government defaulted on Grain Marketing Board debt and the parastatals had to reduce administrative and transport costs to a minimum. These economic realities persuaded government to adopt the economic structural adjustment programme that saw the liberalization of agricultural markets in 1991.

The decontrol of the white maize market in 1992 was controversial. It started when the government allowed maize to be moved between contiguous communal areas. By February 1992, free movement of maize was allowed in the arid regions (natural regions IV and V), the Grain Marketing Board remaining a residual buyer at a set floor price. At the same time the movement of maize between non-contiguous communal areas was also permitted. One of the most far-reaching effects of the restructuring of the markets occurred in 1992 with the removal of the subsidy on refined maize meal. This subsidy had only been available to large-scale millers and the industry was concentrated in the hands of three companies, namely, National Foods, Blue Ribbon Foods and Victoria Milling Company, including two linked to multinationals (Rubey, 1995). Lifting the subsidy and allowing smallholders direct access to urban markets resulted in a rapid expansion in the number of small milling companies. By 1993, prices and domestic markets were decontrolled for all commodities except maize and wheat. Licences had to be obtained for external trade in most commodities.

¹⁵⁹ There are three types of maize meal consumed in Zimbabwe:

- a) Hammer meal is straight-run ground maize without any components removed, usually consumed in rural and low income urban areas;
- b) Roller meal found in urban areas has a few components such as husks removed in the milling process. This is meant for mass markets and is cheaper than refined mealie meal
- c) Refined or super refined maize meal has some components removed and processed. Is less nutritious but popular with the urban elite.

Maize marketing and prices were fully decontrolled on the domestic market by 1996 although the Grain Marketing Board remained the sole importer and exporter of maize (granting licences for trade on its behalf). The Grain Marketing Board was mandated to set prices to operate as floor and ceiling prices to stabilize prices and was also required to hold national strategic grain reserves and to provide services to disadvantaged rural communities. Maize trading throughout the country was freed and all subsidies removed.

The marketing reforms performed better than even the most ardent free market advocates had anticipated. The market no longer operated along a single channel between major cities and the rest of the country. As the marketing of major commodities opened up, traders became established and marketing of other commodities and opportunities for local industrialization, trade and exchange widened.¹⁶⁰ The decontrols were also effective because they were accompanied by the lifting of restrictions on foreign currency and imports, thus allowing for purchase of transport, processing equipment and other inputs by new entrants. Rural entrepreneurs were able to take advantage of the investment made in infrastructure development in the previous decade. However, producers, local processors¹⁶¹ and rural traders continued to be hampered by the high tariffs on vehicles, taxes on fuels, unwieldy regulations and poor telecommunications. Anecdotal evidence indicates that in those areas with network access, cellphone communication had increased market efficiency and resulted in some cross-country trading as a result of better access to information.

The multiplier and dynamic effects of maize market liberalization appear to have been considerable as rural trading and processing expanded and communal area farmers became more active in commercialized agriculture towards the end of the century. The informal sector throughout the country grew significantly in the 1990s.

Impact of liberalization on producers, processors and traders

After price and marketing decontrol, small traders and multinational corporations began to offer marketing services to farmers. The first year of private trading, following the good 1994 harvest, resulted in producers being paid less than the Grain Marketing Board price by private traders in communal areas (ZFU Marketing Survey, 1996). However, the main advantages to producers of using private traders were instant payment, farm-gate collection, packaging and grading services; thus farmers preferred to use private traders even at discounted prices. The 1995 harvest was poor and the prices paid to producers by

¹⁶⁰ There was a marked increase in the sale of traditional foods in urban areas.

¹⁶¹ There was an increase of 115 per cent in the number of hammer millers between 1992 and 1995, the surplus grain areas having the strongest response (Zimbabwe national hammer miller status study, USAID, 1996).

private traders were more than double those paid by Grain Marketing Board by early 1996. Despite very good rains and large supplies, the prices did not drop the following year. The reduced inefficiencies in the maize market system appeared to offset the supply effect on price in the new free market system.

Cotton farmers benefited from the intense competition between three large traders (Cottco, Cargill and Cotpro) to purchase the cotton crop and prices rose despite relatively low international prices. As most of the cotton farmers are smallholders, the decontrol had positive impacts on both growth and equity. There were also beneficial effects for groundnut and other farmers with the expansion of local processing facilities. The activities of traders in the area and increased transport resulted in increases in horticultural sales and in the more widespread marketing of wild fruits, insects and small mammals.

Efforts to commercialize the Grain Marketing Board highlighted the conflicts between having to be profitable, holding buffer stocks and stabilizing prices. Most farmers benefited from the Grain Marketing Board's continued provision of a safety-net as a buyer of last resort and at the same time took advantage of a more open trading environment. The producers negatively affected by decontrol and commercialization were small, surplus farmers in remote areas where the Grain Marketing Board depots had closed down. These areas had high transport and transaction costs with a few scattered farmers producing small surpluses. Until the infrastructure is improved and larger, more consistent supplies of commodities and higher-value outputs are produced, it is likely that these areas will remain undeveloped. In the poor, rainfall-deficit areas producers benefited from the opening of markets and even the closure of depots since they could now legally take advantage of the high demand for grain in those areas.

The most remarkable result of decontrol was the significant increase in rural and urban small-scale millers, the increase in the number of rural traders and the opportunities for growth with equity as the multiplier effects and options for local specialization and exchange expanded. The supply response was almost immediate and occurred despite the high interest rates which particularly affected new enterprises, the stringent health regulations¹⁶² and the many other bureaucratic and financial problems facing their entry. Barriers to entry for rural traders were significantly reduced by the lack of any licensing requirements thus allowing the market to be more competitive than in those coun-

¹⁶² There are over 23 stipulated requirements to meet urban health regulations. These are broadly applied to all food processing and many of the requirements are unnecessary. Their existence, however, makes investors vulnerable to arbitrary closure by politicians and bureaucrats with other agendas. Regulations may even be inappropriate to large industrial manufacturers. They were introduced during the era when prices were controlled and based on costs of production so that their costs were borne by consumers or government subsidies and attracted no objections from the industrialists.

tries where traders had to be licensed. There is need for some lobbying for licensing, however, to reduce operations of unscrupulous traders and to raise local district revenues but experience elsewhere indicates that the transaction costs imposed by a licensing system would outweigh any benefits from the controls.

Impact on consumers

The removal of subsidies, particularly on maize meal (roller meal), was expected to have negative income effects for the poor – certainly in the short term. But the less refined products were produced at prices similar to those of the previously subsidized, refined, industrially-milled, roller meal (Rubey, 1995). It was estimated that in January 1992, only 5 per cent of urban consumers purchased some straight-run meal but surveys indicate this had climbed to over 80 per cent of the urban population by 2000.

Despite the lifting of subsidies, real selling prices of maize were slightly lower than they had been before the reforms. Although the nominal price of roller meal increased substantially, the option to purchase grain reduced basic food costs by making cheaper hammer-milled maize available (Muir, 1998).¹⁶³ Poor consumers benefited from the decontrol both nutritionally and financially. The increased availability of hammer-milled meal at 60–75 per cent the cost of roller meal helped offset the adverse effects of liberalization on consumers. However, large-scale millers¹⁶⁴ continued to access the lower cost Grain Marketing Board held stocks while the small-scale milling sector did not have access to these supplies, forcing them to source higher priced grain from the market. After the food riots in 1998, the large-scale millers were again given an unfair advantage as the Grain Marketing Board retailed maize grain at lower prices to a few selected registered millers to try to limit the extent to which the millers raised roller meal prices to consumers.¹⁶⁵

The inability of the Grain Marketing Board's pricing structure to adjust to prevailing market conditions resulted in serious problems. Inefficiencies were created as those who could access the cheaper Grain Marketing Board supplies were able to amass benefits at the expense of the hammer millers, traders and consumers who relied on the open market for maize supplies. The system did not necessarily reward the most efficient actors in the marketing system. Maize meal prices soared as a result of these inefficiencies and the government re-introduced price controls on roller meal in 1999. This policy however could

¹⁶³ The hammer-milled maize contains more vitamins and nutrients although it is often less preferred in low-density urban suburbs as it involves an investment of time.

¹⁶⁴ There are three major large-scale millers, National Foods being the largest.

¹⁶⁵ In 1998 Grain Marketing Board increased nominal selling prices of grain by 30 per cent to Z\$2,900. Grain Marketing Board continued to pay farmers Z\$1200 and increased the price in response to the imports needed to increase stocks.

not be administered effectively with the bulk of maize being processed by the informal sector. Furthermore the reintroduction of subsidies on industrial roller meal in 1999 following the food riots, weakened the small-scale milling sector (Jayne *et al.*, 1999; McKay, 2001). Rural consumers benefited more than urban consumers from decontrol when comparing the costs of roller meal with locally processed meal (Stack, 1997). This was to be expected as the transport and transactions costs savings were greater. In addition, the informal market responded more strongly to supply, giving better price signals than the formal market. The rural poor did not benefit from subsidies because of limited access and, even with access, the subsidized meal was more expensive than their own produce. A large proportion of the subsidy goes to the rich, to pet food and other leakages. In addition the nutritional benefits from wider consumption of the less refined maize meal are important.

Liberalization also benefited consumers indirectly through the dynamic effects of the establishment of small millers and processors which provide a focal point for the exchange of other commodities. In addition the increased competition forced industrial millers to become more efficient, reducing real prices but with some costs to formal sector employment. This was largely offset by those employed in the small milling sector, although at lower wages.

The role of government in agricultural marketing

The drought of 1991/92 eliminated the plan to reduce agricultural subsidies. It was the worst drought ever experienced in the country and came after almost a decade of below average rainfall so that both the surface and underground water supplies were also low and most families did not have any stocks of food. The government responded by introducing a large supplementary feeding programme. Another drought in 1994/95 also affected the subsidy position. In general, all subsidies to agricultural parastatals that made losses were reduced (except the drought-related Grain Marketing Board losses) significantly and some parastatals even made profits. The state was expected to ensure constant access at reasonable prices to the basic staple, maize, and had invested in infrastructure and physical and financial strategic reserves in most years. However, financial constraints contributed to the low producer prices in 1997 and the inability of Grain Marketing Board to compete with private traders and to replenish buffer stocks. This in turn contributed to the 1998 food riots and the reintroduction of controls and subsidies. The escalation of the Grain Marketing Board debt to Z\$10 billion resulted in pressures to hold down producer prices. Institutional factors related to threats of land redistribution with designation of 1,471 large-scale commercial farms further reduced maize supply and resulted in a severe food deficit. The compulsory acquisition in the first five years of the new millennium saw a rapid decline in food crops and created intense food insecurity.

The Grain Marketing Board was not effective in fulfilling its social roles because of inadequate or late financing and was not able to compete with the private sector for access to maize supplies, particularly in deficit years. All domestic maize trading was banned in late 2001 and all maize grain could be sold only to the Grain Marketing Board. This applied to every trader. The Grain Marketing Board then serviced only selected millers, threatening the survival of the urban and rural food processors, leaving them to source grain illegally and operate with no security. To the extent that these regulations were not enforceable in the more remote areas, it may encourage increased investment in rural hammer mills, particularly if maize meal sales remain unsubsidized and uncontrolled.

Early in 2002, the holding of all grain stocks by farmers was banned and grain supplies were seized, leaving the livestock industry and farmworkers facing disaster. Even some smallholder farmers had grain stocks seized and all existing grain contracts were cancelled. The dislocation, controls and subsidies affected downstream industries, consumers and farmers, and had severe negative impacts on rural development.

Cotton marketing

Prior to reforms, government controlled cotton marketing through the Cotton Marketing Board. The price of cotton was established on the basis that the local textile industry¹⁶⁶ had all their needs met at a predetermined price that was normally significantly below prices which would have been obtained from exporting cotton lint. Cotton seed was sold below export parity to the local oil processing industry. These pricing policies affected growth by reallocating resources away from cotton production and were also regressive. Smallholders accounted for over 50 per cent of total cotton production in most years and they were effectively subsidizing industrialists.

The Cotton Marketing Board was granted formal managerial autonomy in 1991. In the period 1993 to 1994 the board's statutory monopoly in purchasing, ginning, marketing and exporting of cotton was removed. The Cotton Company of Zimbabwe (Cottco) was launched in 1994 to replace the Cotton Marketing Board. Cottco was privatized in October 1997 and was listed on the Zimbabwe stock exchange where it has been very successful. Once the cotton sector was opened up to competition, new competitors began entering the market in the period 1995–1996. Cargill, a United States of America based multinational company, entered the market and introduced the cash payment system. Smallholder farmers welcomed the cash payment system as this assured

¹⁶⁶ The textile industry was dominated by two companies, David Whitehead and Cone Textiles.

Table 13.4 Grade A cotton prices (Z\$/kg seed cotton)

Harvest year	Cottco	Name of company Cotpro	Cargill
1994	3.89	Unavailable	Not yet in operation
1995	4.30	4.83	5.00
1996	5.81	6.25	5.70
1997	6.00	6.32	6.00
1998	9.37	9.35	8.02
1999	14.50	14.75	15.00

Sources: Larsen (2001); Cotton Growers' Association

immediate access to cash as opposed to the Cotton Marketing Board system where producers received a cheque payment two to four weeks after delivery of the cotton. The Cotton Producers Association (Cotpro) Limited, a cooperative representing large-scale commercial cotton producers, was the other major competitor to enter the market. A few other small Zimbabwean traders also entered the market as mobile buyers. The three major companies organized their own buying posts and collection points staffed with their own employees so that they did not rely on commissioned agents or independent buyers. The competition between the three companies also led them to supply credit and inputs which were tied to sales. Before the reform of the cotton sector, producer prices of cotton were 58 per cent of the international price from 1990 to 1993. Following the decision to open up the cotton sector to greater competition, the ratio of domestic to international prices of cotton rose by more than a third. For the period 1994 to 1997 the ratio of domestic to international prices was 79 per cent (World Bank, 1999). Following the reforms in the cotton sector, production increased and farmers have been receiving between 80 and 90 per cent of world prices. The emergence of private traders, exporters and ginneries gave new dynamism to the rural sector (World Bank, 2000). A review of the seed cotton prices from 1994 to 1999 shows that Cotpro and Cottco offered similar prices, with Cottco acting as the price leader. Cottco and Cotpro adopted price-setting policies based on the seasonal pool pricing system¹⁶⁷ whereby farmers actually received payments twice a year. However, Cotpro and Cargill pricing depended on Cottco's prices. Cottco continues to play the role of price leader in the market thus limiting effective competition in the industry. Table

¹⁶⁷ The seasonal pool pricing system is an option whereby farmers are paid an interim price on delivery of their cotton and at the end of the season an adjustment is made. This provides farmers with the opportunity to benefit from international price movements but incurs more risk.

13.4 shows the price indices for seed cotton after cotton trade was liberalized.

Cotpro limited was taken over by Cottco in 2000 due to financial difficulties and was wholly owned by Cottco by 2005. Cottco accounted for 80 to 85 per cent of the market in 2000 and now maintains monopoly power.

Dairy marketing

The Dairy Marketing Board was commercialized in 1993 and then fully privatized as Dairiboard Zimbabwe Limited in 1996. The government removed price controls and allowed the entry of private companies and cooperatives into the milk industry, such as Quality Dairies in Marondera, Masvingo Coop, Kershelmar Dairies in Bulawayo and multinational companies such as Nestle Zimbabwe (Private) Limited. Some price and non-price competition and a wider range of dairy products resulted. Barriers to entry were high and were particularly formidable for small dairies which were severely hampered by strict health regulations and the high cost of the sophisticated processing and storage equipment required.

The Dairy Marketing Board responded to commercialization by reducing staff, leasing commercially unviable depots in urban and rural areas, privatizing the milk rounds, upgrading the transport fleet, tightening budget controls and increasing milk prices. Significant losses were transformed into profits within a year. This was the result of the increased efficiencies but also increased consumer prices for these relatively price inelastic commodities as well as limited competition. Because of droughts in the early 1990s and the rising costs of stockfeeds, farmers reduced milk production despite increased producer prices.

In 2000 Dairiboard Zimbabwe Limited purchased 85 per cent of the national milk deliveries. Dairiboard Zimbabwe Limited significantly benefited from exports to Malawi and Kenya. Nestle purchased 8.5 per cent and the remaining share went to a few small processors. The rural dairy industry has not been able to attract many entrants due to the poor viability of smallholder dairying (Hanyani-Mlambo *et al.*, 1998; Makamure *et al.*, 2001).

Livestock and beef marketing

The Cold Storage Commission was established in 1937 to control the beef industry and its mandate evolved over the years. According to the Cold Storage Commission Act, the commission was given the mandate to purchase all livestock delivered by any person, operate abattoirs and refrigeration works for the purpose of chilling, freezing and storing beef, mutton, pork, poultry, fish and any other perishable foodstuffs of whatever nature, and operate canning factories and works for manufacturing glue, blood meal and other byproducts of the carcasses of livestock.

From 1991, beef marketing on the domestic market was liberalized and private abattoirs were allowed to operate provided they were licensed, inspected and conformed to hygiene standards and regulations. The liberalization of the beef industry induced a proliferation of private slaughterhouses of which 54 were registered private abattoirs (Makamure *et al.*, 2001). The Cold Storage Commission (now the Cold Storage Company) experienced declining throughput. In 1990 the Cold Storage Commission contributed 52 per cent of the total cattle slaughter but this declined to 22 per cent by 1999. Activities by registered and unregistered abattoirs increased over the same period. The Cold Storage Commission has a monopoly on international beef markets although licences were also granted to meat processors to export. Exports to Europe under the Lome Conventions¹⁶⁸ had contributed significantly to the value of the beef industry and disruptions to the flow of exports¹⁶⁹ have reduced Cold Storage Commission profitability and resulted in potential foreclosure of some of its operations.

Tobacco marketing

The tobacco industry has been largely free from interventions and prices reflect world price trends less the export tax. All tobacco must be sold on the licensed auction floors and no private arrangements can be made. At the auction floors local and international tobacco buying companies bid for each bale of tobacco sold. The Tobacco Industry Marketing Board¹⁷⁰ is the government body regulating tobacco marketing in Zimbabwe. The Tobacco Sales Floor¹⁷¹ and Burley Marketing Zimbabwe have dominated the industry for years. Boka Tobacco Auction Floors opened in 1998 to provide some competition for the Tobacco Sales Floor on flue-cured tobacco but closed in 1999. The Zimbabwe Industry Tobacco Auction Centre (formerly Boka Tobacco Auction Floors) entered the market in 2001 with a mandated equal share in all tobacco sales. International marketing of tobacco leaf is conducted by multinationals. There

¹⁶⁸ Zimbabwe first gained access to the European Commission market in 1985 with a quota of 8,100 tonnes under the Lome III Convention. In 1987, the quota was increased to 9,100 tonnes under the Lome IV Convention.

¹⁶⁹ Operational inefficiencies relating to unacceptable packaging, foot and mouth disease and political factors restricted exports in 2001.

¹⁷⁰ In 1994, the Tobacco Marketing Board was reconstituted to cater for the interests of all classes of different types of tobacco growers and buyers and indigenous buyers competed with traditional buyers for the first time. In 1997 the Tobacco Marketing and Levy (Amendment) Act, 1997 changed the structure of the board and gave it a new name, the Tobacco Industry Marketing Board.

¹⁷¹ From 1983 through to 1994 Tobacco Sales Floors handled the entire Zimbabwe flue-cured tobacco crop.

was concern that these companies collude to form buying cartels thus creating distortions in transmitting the world price to farmers. In 2001. There was a significant drop in tobacco planted and continued declines were expected as the land reform displaced large-scale farmers and the overvalued exchange rate reduced the profitability of tobacco for smallholders. The real net protection was estimated at 80 per cent using the parallel market rate and 66 per cent using the estimated real exchange rate in June 2002. This was after taking into account the subsidy being paid to farmers to reduce the impact of overvaluation.

Marketing of other commodities

The horticultural industry has limited government control and regulation. Export market and safety regulations are in place and a number of farmer marketing cooperatives are active in supplying international markets. Horticultural exports are dominated by the capital-intensive, large-scale sector although there has been a small increase in outgrower schemes incorporating smallholder farmers. The main factors limiting expansion are the overvalued exchange rate which severely taxes all exports and the import content of the investments needed for sophisticated horticultural export operations. On the domestic market, farmers sell their crop directly to wholesalers, retail outlets, open markets and hawkers. The local market is supplied by exporters when produce is below standard or transport is unavailable and also by many small rural producers who sell mainly through cooperatives and the informal sector. The prices on the domestic market are largely determined by supply and demand with the urban centres being the reference point for prices. Poor access to market information reduces efficiency, particularly for smallholders because of the perishability of most of the crops. Those with aspirations to export are more affected by the currency distortions since they have limited information and lack the necessary social capital to access imports or trade on the formal currency markets.

Large-scale farmers are directly involved in marketing soyabeans, coffee, groundnuts, paprika, ostriches and other products either to local processing or trading companies, or directly on the international market. Some of these commodities have strict regulations and marketing restrictions in order to maintain standards and promote the industry. However, these restrictions can also act as barriers to competition and some investigation of the costs and benefits of these systems needs to be made. Smallholders market through traders and neighbouring large farmers but unless they form marketing syndicates which can bulk produce, they remain at a disadvantage with their low levels of output, poor infrastructure and limited access to information.

Marketing through ZIMACE

An important private sector response to the deregulation of agricultural markets was the emergence of the Zimbabwe Agricultural Commodity Exchange, known as ZIMACE. It was set up in 1994 to provide a mechanism for price discovery and coordination of the exchange of agricultural commodities. Zimbabwe was one of the first countries in Africa to have a commodity exchange. ZIMACE started as a holding company with a single broker providing a market for products but it expanded over the years to include buyers and end users. It facilitated the trade of any commodity provided or desired by any consenting parties except for tea, tobacco and horticultural produce. It was an exchange mechanism where buyers and sellers could interact, enabling the articulation of supply and demand conditions. Spot and forward sales took place on ZIMACE. The exchange provided a potentially important means for farmers, traders and millers to manage price risks and reduce the transaction costs of identifying potential buyers and/or sellers.

The volumes of commodities traded at ZIMACE increased by an average of 35 per cent per year between 1994 and 1999 as farmers took advantage of the partially liberalized agricultural marketing system. In 1995/96 and 1996/97, it traded 50,000 tonnes of maize, accounting for 4 to 6 per cent of the national marketed maize supply from domestic production. During the 1997/98 agricultural marketing year, a total of 224,531 tonnes of agricultural commodities were traded through the exchange compared with 107,000 tonnes in 1996/1997. Some Z\$759 million (real terms) were traded through ZIMACE during the period April to January 1999 compared to Z\$267 million for the same period in 1998 (ZIMACE Trader, 1998; Muchopa, 1999; Jayne *et al.*, 1999).

ZIMACE was mainly used by large-scale commercial farmers and industrial buyers. Membership consisted of conglomerates such as Delta, Olivine Industries, large-scale commercial farmers and large millers. There were a total of 17 brokers on the exchange, the Commercial Farmers' Union being one. Only registered members or their employees were allowed to trade through ZIMACE. Of the members, 75 per cent were broking members and 25 per cent were non-broking members.¹⁷² ZIMACE's prices were used as reference prices in negotiating forward contracts with farmers and larger traders within ZIMACE and by traders and farmers negotiating sales outside. Its greatest contribution to agricultural marketing in Zimbabwe was to act as a completely transparent instrument of price discovery for agricultural producers. A significant develop-

¹⁷² Broking members exclusively dealt in the Zimbabwe Agricultural Commodity Exchange whilst non-broking members could buy and sell elsewhere. However, non-broking members could not make contacts directly through the Zimbabwe Agricultural Commodity Exchange, they had to find a broking member who made a contract for them.

ment was that smallholders were basing the prices of their commodities on the exchange's prices, putting them in a better bargaining position as they looked for markets for their produce (Muchopa, 1999).

In July 2001 a Statutory Instrument 235A of 2001 was introduced declaring maize, maize products, wheat and wheat products controlled products within Zimbabwe. This made it illegal to buy, sell or move these products within Zimbabwe other than to the Grain Marketing Board. In the light of these developments, trade at ZIMACE was officially suspended (ZIMACE, 2001).

Conclusion

The state-controlled agricultural marketing system of the pre-independence era played an important role in commercializing the production of major commodities. However the system discriminated against smallholders. The expansion of this system to smallholders after independence created a serious fiscal burden but it had a positive impact on smallholder producers in remote regions who did not have a comparative advantage in maize production. In general, however, the price and marketing policies impacted negatively on both growth and equity.

The liberalization of the market system in the 1990s generated some positive effects for many farmers, rural traders and urban consumers and played a role in reducing parastatal debts. However, some of the privatized boards retained effective monopolies which limited the benefits to producers and consumers. The liberalization of the grain market assisted the smallholder sector and traders, and contributed to rural industrialization.

The reintroduction of controls on maize marketing was a drawback to the gains from the economic structural adjustment programme. The return to maize and wheat marketing monopoly and price controls was a source of great concern to farmers, consumers and traders. This move saw a retrogressive development in the domestic market at a time when newly resettled farmers required a clear articulation of marketing and pricing incentives to stimulate food production and arrest the decline in per capita national food production experienced after 2000. Agricultural marketing could be improved by the following:

- Encouraging rural development and expanding local markets and opportunities for traders;
- Improving agricultural growth by reducing marketing margins and barriers to entry, increasing competition and improving infrastructure and communication;
- Improving equity (and reducing price instability) by ensuring that the Grain Marketing Board can fulfil its role as buyer and seller of last resort; and
- Improving national food security by establishing secure financial and stock reserves for basic staples.

The state marketing monopolies were disbanded as a result of the structural adjustment programme but they have been converted into private monopolies. Therefore the state needs to foster competition and remove barriers to entry. The state needs to play a much more active role in improving infrastructure, making information widely accessible and encouraging more traders and processors to operate in the rural areas. Access to finance, foreign currency and processing and transport inputs is necessary to assist small processors and traders. There has been an increase in Chinese and Indian imports of equipment appropriate to small processors and these efforts need to be encouraged through access to foreign currency and low tariffs. The overvalued exchange rate and limited access to foreign currency for imports is a serious disruption to this development.

The role of the Grain Marketing Board in providing floor and ceiling prices could reduce the risks faced by poor farmers and poor consumers but for the board to be effective, it needs to sell stocks early when there are shortages and buy stocks early in good surplus years. In the long run, it may be more effective to encourage localized storage and exchange systems to achieve rural food security and ensure that the multiplier effects of maize processing and trading remain in the rural areas.

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